

The Builder.

No. CCLIII.

SATURDAY, DECEMBER 11, 1847.



THE design and arrangement of lunatic asylums have lately occupied the attention of many architects, and, indeed, will continue to do so, as several extensive buildings of this character are about to be erected in different parts of the country. The improved system of treating the insane which has been perfected in England, calls for a very different description of building from the structures formerly used as "mad-houses." Maddening houses they might truly have been termed; and their supervisors and keepers must have been more insane than many of the poor people who, in those times, were locked up in them, with few previous questions. The Asylum at Hanwell, under the management of the estimable Dr. Conolly, has established the great fact that kindness judiciously administered, and regularly enforced with firmness, will do what coercion, with all the aid of whips, strait waistcoats, leg-locks, muffs, straps, and chains, fails to effect. For some years past mechanical restraints have been wholly banished, and patients who are sometimes brought there manacled from prisons and parish receptacles, with the reputation of savage vindictiveness or unappeasable fury, are liberated, placed amongst a certain number of their fellows (properly classed), and a knife and fork put into their hands at dinner-time with perfect impunity.

A walk through this noble establishment, where a thousand patients of the two sexes, in all stages of madness, are congregated, removes the wonder which this fact may at first excite: all are so quiet and orderly, chains are so evidently not needed, that no credit seems due for avoiding the use of them. We forget how this has been brought about,—that it is the result of a system, to which let due honour be given.

The interior of Hanwell Asylum, with a fitting expositor, is a deeply interesting sight, though necessarily a sad one. The Bedlam of former times is now, we hope, simply a tradition.

For the perfection of such a system much depends on the nature of the building in which the patients are placed. In a gloomy, ill-arranged structure, without the means of perfect classification, nothing can be done. Bodily health and a cheerful tone of mind are most important for success, and to ensure these, as far as may be, good drainage and ventilation, light and airy chambers, and the most careful arrangement generally, are necessary. Everything repulsive or disheartening is to be avoided; a good situation, a cheerful aspect, and pleasant prospects are to be sought; and the means of general inspection by the directors, with the least fatigue and waste of time, the centralization of those offices and apartments which are used by the whole of the inhabitants of the building in common, protection of the patients from fire, and the most efficient and economical mode of heating the building, should be most carefully attended to.

Some persons are of opinion that a large asylum should be built on the villa principle, and resemble a little colony, the separate build-

ings being connected only by verandahs; whilst others of more experience, and who have resided in large establishments, state that such an arrangement would require nearly a double staff of officers to perform the duties. This seems evident; and when the extra expense in building, drainage, lighting with gas, and the extra number of boilers for warming, cisterns for the supply of water, and outlay for verandahs, together with other extra expenses which would be incurred in working such an establishment, are taken into consideration, we cannot venture to recommend such an arrangement.

Again: some few among those who take an interest in the cause of the insane recommend that the chapel of an asylum should be detached, and at some little distance from the main building. Those who entertain such an opinion, however, are not aware, perhaps, that the patients attend chapel, not on Sundays only, but twice a day throughout the winter as well as summer; and that to take feeble patients from the warm wards to the chapel, even though there be covered ways, would have a very prejudicial effect upon their health; besides, much needless expense would be incurred in the construction and working of a separate warming apparatus for the chapel alone, which would be avoided by having it conveniently situated in the asylum, and within reach of one of the boilers, from whence the heat for warming might be supplied when necessary.

The difficulties in arranging a lunatic asylum increase greatly when it is to accommodate more than five hundred patients. When it is for a thousand patients, as in the case of the additional pauper asylum for Middlesex, to be erected at Colney Hatch, to which we briefly alluded last week, there is a temptation to resort to a building *three stories* in height, which is very properly objected to by the Commissioners in Lunacy, and is decidedly to be avoided. The disadvantages of a third story are obvious, such as the additional fatigue occasioned by it, and the obstacle this affords to a proper supervision of it. Dr. Conolly, in a letter to the chairman of the Committee of Visitors, Benjamin Rotch, Esq., on the intended new asylum, which he published a short time ago, takes the same view of the question, and urges the magistrates to confine their new building to two stories.

In noticing this letter, the *Westminster Review* says:—

"Agreeing with the general principles laid down by Dr. Conolly on this point, it yet seems to resolve itself into a question of mechanical arrangement. His objection to the third story is on the score of physical labour, in ascending and descending. But this labour would not exist in a well-arranged asylum. Apart from these considerations there is no doubt that the average atmosphere is purer and better adapted for human breathing at a height of from fifty to one hundred feet above the surface of the earth than it is at the surface, whether that surface be composed of clay or gravel. The air is drier at that height, as we get beyond the line of surface evaporation, and within that line the deleterious gases are found most prevalent. Low spirits are synonymous with moisture; the nerves become flaccid and unbraced, like stringed instruments out of tune. Moist air carries off the electricity from the body; dry air does not. Moist air, with heat, is the atmosphere of fever and liver complaint. Moist air, with heat and stillness, is the atmosphere of putridity, the paradise of mosquitoes."

"In deep mines and in lofty factories, where the saving of human labour is an important element in profit, machinery is adopted to raise and lower the workmen without muscular exertion. Adapting the same machinery to hospitals and asylums, there seems

to be no reason why four, six, or more stories should not be available. A steam-engine, or other labour-saving power, we take it, should be a concomitant of every well-arranged asylum, in order to furnish employment—that essential to the cure of mental disease—to patients. And that employment should be as various as human tastes. The two great sources of human misery are—want of employment, and individuals being misfitted to their employment. We can conceive it possible that an asylum under the best arrangements might be nearly self-supporting,—the patients doing nearly all the work of the establishment. Our ideas on the subject are, that the building should be of *six stories* in height, in the form of a parallelogram, or of two sides of a square, and with machine lifts: one in the centre and one at each end, rising and falling from floor to floor, alternately. The middle lift might serve as an observatory for watching the galleries. The whole should be fire-proof. The steam-engine should keep a constant supply of hot and cold water to the top of the building, and all refuse, wet or dry, should be conveyed down proper shoots. Warm or cold air should be introduced at pleasure through double floors, and gas laid on wherever required. In so large an establishment a gas-work would be a matter of course, and the workshops might be contiguous to it. As the engine would be constantly going, the lifts would be always in motion, but of course staircases would be provided for emergencies. One entire door, probably the centre, should be appropriated for the residence of the officers of the establishment; and there is no reason why they should not be divided into suites of apartments, as private, and far more convenient than any detached houses. Along the galleries rails should be laid, on which small trucks should run with soft-tired wheels, giving no sound, and communicating with the lifts. In this mode food or fuel could be taken anywhere with the minimum of labour, either up or down. A sound reason, we conceive, for preferring several stories to an extended area, is getting the best aspect for the greatest number of rooms. There is but one south-west, and the best form would be a re-entrant angle forming two sides of a square, one looking south and the other west, over a garden; the galleries of access being at the back of the rooms, at the salient angle. From the centre the view might thus be attained down both wings. The length of the angles being regulated by convenience, they might be multiplied in number, each having the same aspect, yet not overlooking each other."

The height of such a building, with its consequent shade and gloom, presents an insuperable objection in our minds to such an arrangement, even were there none other: the observations, however, are sufficiently suggestive to deserve extracting.

The provision of a sufficient number of single sleeping-rooms, and the avoidance of dormitories with more than eight or ten beds in each, are essential points in a lunatic asylum.

Above all things, however, it is important that the building should be fire-proof. The commissioners, in their instructions, say:—"The staircases throughout the building should be of stone. In all cases, the store-rooms for inflammable stores should be thoroughly fire-proof. If timber floors are used, there must be a disconnection of the floor and joists at all the internal doorways, by means of a stone sill; similar separations, at not greater distances apart than 50 feet, should be made in the floor and joists of the galleries or corridors; and provision should be made for a complete fire-proof separation of the timbers of the roof, at distances of not more than 50 feet, according to the arrangements of the plan."

This, however is not sufficient to prevent the most fearful calamity in the event of a fire occurring. In all buildings appropriated to the sick, the infirm, or the old, the whole structure should unquestionably be fire-proof. Even in